

Evaluating enterprise education – why do it?

This paper is a conceptual development, following research into graduate entrepreneurs and their experience of enterprise education in university. The case studies are limited to graduates of one university in Wales. One of the key findings of the research was that none of the graduate entrepreneurs labelled themselves as entrepreneurs and furthermore questioned the meaning of the word and its relevance to them.

This leads to the discussion in this paper whereby the locus of the *self-identity* of students experiencing forms of enterprise education; the labelling of such people by the teachers and institutions where enterprise education takes place and the implications of differences to the evaluation of enterprise education are examined. The authors argue that evaluation of enterprise education needs to develop beyond the economist view whereby business start-up and business growth are key factors; and educationally beyond institutional requirements of pass rates and grades.

Through the socio-psychological lens of identity, this paper promotes the notion that evaluations of enterprise education need to expand and should encompass prime pedagogical objectives that education enables people to grow and develop, to shape their own new identities in the light of their learning experiences.

Introduction

This paper extends from a qualitative PhD study, which presented sixteen case studies of the life stories of graduate entrepreneurs in Wales (Edwards, 2011). Following a constructivist philosophy, the aim of the study was to evaluate and present new meaning of the learning processes required *to become* an entrepreneur, foreseeing that the social construction of learning within the graduate entrepreneurs' social worlds as crucial to understanding the processes of *becoming* an entrepreneur. However, one of the main outcomes of the research was the graduate entrepreneurs' disassociation with the term 'entrepreneur'. Therefore, the purpose of this paper is to discuss the implications of evaluating enterprise education foremost within the context of understanding 'the entrepreneur' as a label and an identity.

Since the inception of research into the field of entrepreneurship, academics can neither agree on a definition of the term 'entrepreneur' nor the notion of 'enterprise'. There is a tacit understanding that 'entrepreneurs' are not a homogenous group; the term must clearly be given meaning in relation to any particular study and that the concept is dynamic, whereby changes over time may not be linear (Edwards, 2011). Moreover, the infamous question 'what is an entrepreneur?' has fuelled debates concerning entrepreneurship as an

academic discipline, questioning whether entrepreneurship can be taught (Hills, 1988), to whether Universities have a role in the teaching, development and creation of students as future entrepreneurs (Williams, 2003) to determining the purpose of programmes to be 'for' or 'about' entrepreneurship (Levie, 1999 and Handscombe, Rodriguez-Falcon and Patterson, 2005) and differences between learning for the development of business skills and that of developing creativity, innovation and risk management (Watson, 2001).

Learning *about* enterprise and learning as part of the process of *becoming an entrepreneur*, may be a formal, informal or social activity (Rae 1999, Edwards and Muir 2005). Social learning (Rae,1999) is less placed in the university setting and whilst research has concluded that background and pre-entrepreneurial learning opportunities have an impact upon the propensity to become an entrepreneur (Edwards, 2011) little has been studied about the university role in this context. Universities in the main, have focused upon the first activity (learning about enterprise) whereby teaching has focused upon the skills and understanding needed to run a small business; specific skills such as finance, leadership, managing change in larger businesses and more personal aspects of entrepreneurial practice (Gibb,1994). Whilst there is debate as to whether *teaching enterprise* should be contained within business schools (Hills, 1988), be a university wide initiative; embedded within the curriculum, or facilitated through a specific faculty/enterprise centre (Matlay, 2005), further discussions as to whether enterprise education (and in this case 'teaching enterprise') is best offered at undergraduate or post-graduate level have surfaced but not been expanded (Edwards, 2011) as well as the practicalities of teaching enterprise:

"The tension between the academic and the practical approach is only part of the story. Many researchers make the case for more flexible teaching methods that stimulate the real world environment. They recommend learning by doing, encouraging independence and stimulating students to think for themselves, thus giving them ownership of their own learning. They also emphasize feelings, attitudes and values, thereby placing more importance on experiential learning" Handscombe, Rodriguez-Falcon and Patterson (2005:3)

The aforementioned 'learning by doing' approach is often within the remit of 'informal learning' (non-accredited/extracurricular education) rather than formal (accredited) learning and thus educators exert caution over developing practical courses as "...the implications for educational establishments are how to accredit *applied* courses?" Edwards (2011:48). Yet, where and how enterprise education is taught, standard university evaluations apply: the focus is upon the number of students registered for courses, the pass rates and grades (Ireson, Mortimore, and Hallam 1999).

In summary, universities privilege the development of specific knowledge and skills development for business management. Some enterprise/entrepreneur education programmes give consideration to the understanding of the entrepreneur, entrepreneurial activity, opportunity evaluation and exploitation. On the contrary, less consideration is given to the development of the entrepreneur as a transformed being, journeying from roles of student to entrepreneur, through the process of being a potential entrepreneur and then becoming a practicing entrepreneur (Edwards, 2011).

Evaluating ‘the entrepreneur’: as an identity or a label?

Just as those attempting to define the ‘entrepreneur’, social scientists, psychologists and philosophers have attempted to define ‘identity’ and conclude that it is polymorphic, dynamic, influenced by many different aspects of life, liable to change and that individuals may hold multiple identities relating to differing groups (Burke and Stets, 2009). However, there is a consensus that ‘identity’ is both linked and similar to concepts of the self and individual subjectivity (Elliott, 2008). Identity may be conceptualised as a construct of an individual which changes over time, and, that process of change is impacted upon through social experiences and socialisation (Burke and Tully, 1977 and Ibarra, 1999). Jenkins confirms that identity is a “... process – *identification* – not a ‘thing’. It is not something that one can *have*, or not; it is something that one *does*” (2008: 5). As a consequence of understanding their identity, individuals may attach meaning to their experiences, be cognisant of where they are within society and, after reflection develop guidelines for future action (Hoang and Gimeno, 2005). In the context of this paper it leads the researchers to question whether ‘self identity’ can be evaluated?

Taking a psychological perspective it is accepted that self-identity is a key component in an individual's development of intention, which in turn may lead to certain types of behaviour (Terry, Hogg and White, 1999). Linking self-identity with the broader social environment, past and present, Jenkins maintains that knowing “... ‘the map’ – or even just approximately where we are – does not necessarily tell us where we should go next (although a better or worse route to our destination might be suggested)” (2008:5). Steering the work which an individual must do, to take on a *social identity* means having both a desire and belief, in other words an understanding that it is the right choice for that person (Boer, 2008).

These types of decisions may not be taken alone, for the “... human development process is an interactive process and cannot be otherwise” (Jenkins, 2008:71). For the student entrepreneur, there are many significant figureheads (family, peers, lecturers, entrepreneurs and those working in enterprise support organisations) who may influence them and affect their motivation and nascent entrepreneurial potential (Matlay, 2005). The comments, criticisms, assessments, feedback, perceptible shifts in relationships, all

become the necessary foils and reflections against which the student entrepreneur comes to know themselves. It is through interactions with these people that their motivation and intention to take on an entrepreneurial identity, in other words *to become* an entrepreneur is weakened or strengthened.

Hoang and Gimeno (2005), in their development of a theory of entrepreneurial identity suggest that as an individual develops their identity, so they take on the role(s) associated with that identification. This builds on the concept of 'role identity' which is the juxtaposition of an individual's unique understanding of the role and the socially constructed elements which describe the role (McCall and Simmons, 1966). Given that entrepreneurship, as in 'running an enterprise', is a valid career option and a professional activity, then studies of career change and professional identity are relevant. How a person perceives their entrepreneurial (professional) role and how that is conveyed to others may be considered as their professional (entrepreneurial) identity (Ibarra, 2002). The extent to which someone assesses that they are capable of actually performing the role of 'being an entrepreneur' in all its complexities may be considered as their entrepreneurial career self-efficacy (Bandura, 1986).

Linking professional identity to career self-efficacy, leads to career change intention (Khapova, Arthur, Wilderom and Svensson, 2007). Thus it is reasonable to determine that entrepreneurial identity and the extent to which an individual believes they are capable of *being* an entrepreneur is a fundamental driver for them to *become* an entrepreneur. Enterprise education needs to be positioned as a positive intervention within this development process. Noel (2001) found this to be the case in terms of intention to become an entrepreneur and Fayolle, Gailly and Lassas-Clerc (2006) confirmed that entrepreneurship graduates score highly in entrepreneurial intention, propensity to act as an entrepreneur and entrepreneurial self-efficacy.

The notion of what is an entrepreneur? And how people identify with those who are entrepreneurs will vary according to one's position in society. Thus the entrepreneurial identity may be viewed differently from the frame of reference of a specific discipline such as an academic, economist, psychologist, sociologist or philosopher. Similarly how an entrepreneur is identified will vary through the lenses of the general public and specifically those who may be potential entrepreneurs, entrepreneurs themselves and those involved in providing enterprise support. Therefore, the label 'entrepreneur' has different meanings; both positive and negative (Howorth, Tempest and Coupland, 2005) and is borne out of some form of experience, whether it be research, close involvement with entrepreneurs or third hand information via the media or peers. This then indicates that the purpose of enterprise education is to enable a student to further understand and hone their entrepreneurial roles and how they are personally applied.

Evaluating the entrepreneur in context

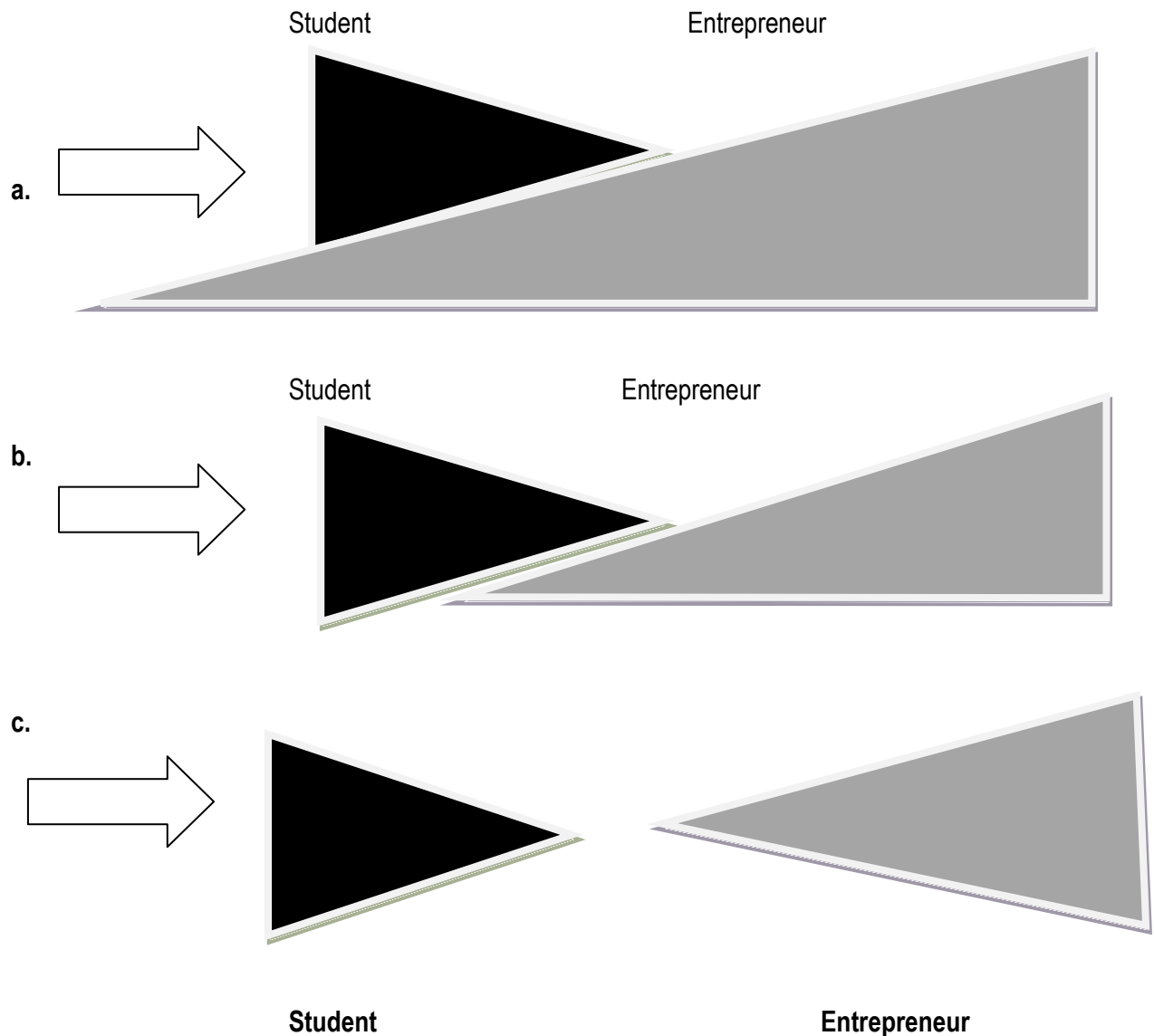
It is perhaps interesting here to note that whilst the word and label 'entrepreneur' is familiar within academic circles and used frequently by researchers and educators, this is not necessarily the case in other institutions and organisations. The Association of Women Entrepreneurs, for example, was formed just after the Second World War, to help women who had taken over their husband's businesses during the war or subsequently as a consequence of his death or injury causing incapacity to manage the business. Furthermore Women in Enterprise, established in the latter part of the twentieth century, was specifically designed as a support for women as potential and practicing entrepreneurs. In Edwards' PhD study of graduate entrepreneurs, not one identified themselves in the sense of self-naming themselves as an 'entrepreneur' (Edwards, 2011). They either considered that they were business people or defined themselves by the business they ran, i.e. web designer, marketer, crèche provider.

"Well I don't like the word entrepreneur, there is something snobby about it, if someone asks me what I do, I say I'm graphic designer, I don't say I'm an entrepreneur and I don't say I have my own company; in my line of business its more relevant to tell people I'm a web developer because they might say 'oh, I need a web developer' but they won't say 'Oh, I need an entrepreneur'" Edwards (2011:194)

Further research could consider whether such 'labelling' impinges upon the relationship between student and enterprise educators and subsequently whether it bears any impact upon the entrepreneurial identity formation of undergraduates.

As has been discussed, one's identity is not static and people will have coexistent multiple identities. In the context of enterprise education it is important to focus upon two key identities: the student identity and the entrepreneurial identity. As has been found in the research (Edwards, 2011), some of the graduate entrepreneurs identified early on in their lives that they were going to *become* an entrepreneur and their drive to achieve this was strong. For them going to university was part of the entrepreneurial action needed prior to entrepreneurial practice. They had clear, linear identities, as in Fig1.a. Where there was no identity conflict within, one identity was a means to taking on the other. For some students, the emerging process of entrepreneurial identity had its beginnings during their time at university, as shown in Fig.1.b. There may have been identity conflict or it may have been a smooth transition, managing dual identities and transferring from the student to entrepreneur identity. Motivation and belief in becoming an entrepreneur, although nonexistent or weak in the beginning, strengthened over time. Finally, the demarcation was not so clear cut. Entrepreneurship as a valid career option may have been latent during their time at university, but was not a strong or considered identity.

Fig. 1. Dual Identities of Student and Entrepreneur.



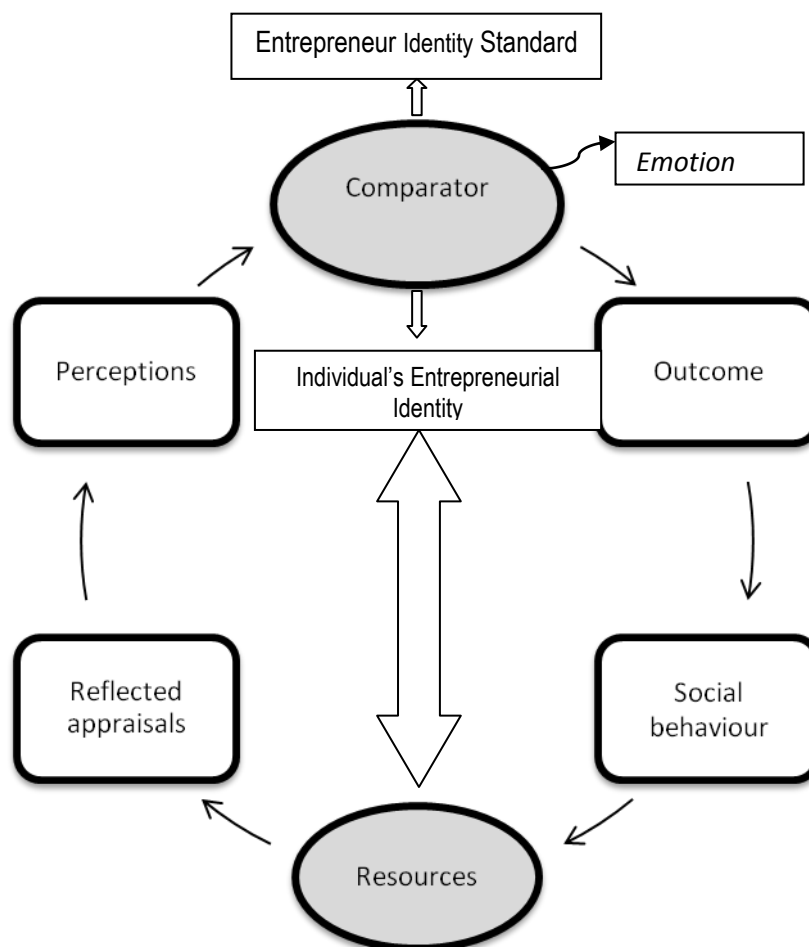
Drawing upon identity theory and the work of Burke and Stets (2009) there is a process through which a student transforms from being a student to being an entrepreneur. Initially, there is the understanding of the classification of what it means to be an entrepreneur; the Entrepreneur Identity Standard.

This is formed by their entrepreneurial experiences and perceptions of what it means to be an entrepreneur and experience plays a significant part in learning and development (Kolb, 1984). The individual has their own identity as a possible entrepreneur, potential entrepreneur, nascent entrepreneur or practising entrepreneur and assesses how near they are to their entrepreneur identity standard; the Entrepreneurial Comparator.

As this is a personal evaluation, emotion cannot be ignored as a consequence of the comparison which may yield positive or negative results. Whatever the outcome, this will trigger social behaviour whereby the decision to move forward into an entrepreneurial career may be halted, deferred or developed. The social behaviour will include reviewing and accessing resources available in their environment. This could be through developing or acquiring confidence, knowledge, skills, experience, contacts, funding and any other symbolic or pragmatic resource, which they believe will move them forward and close the Entrepreneurial Comparator gap.

This social behaviour is intertwined with reflected appraisal by the individual. As a consequence, the individual's perception of their identity position, related to the Entrepreneur Identity Standard, changes. In turn this promotes further social behaviour. The process is neither linear nor constant as may be visualised as in Fig.2: Entrepreneur Identity Development.

Fig. 2: Entrepreneur Identity Development.



This model of the student taking on an entrepreneurial identity provides some guidelines as to where enterprise education intervention might be appropriate. Furthermore, it must be noted, that as the transition to an Entrepreneurial Identity is not an end point but a platform for further professional identity development, there are enterprise education opportunities beyond this first cycle. Beyond revealing enterprise education opportunities, this model may also be used to clarify student learning and support needs and in doing so this leads to the development of appropriate evaluation of programmes.

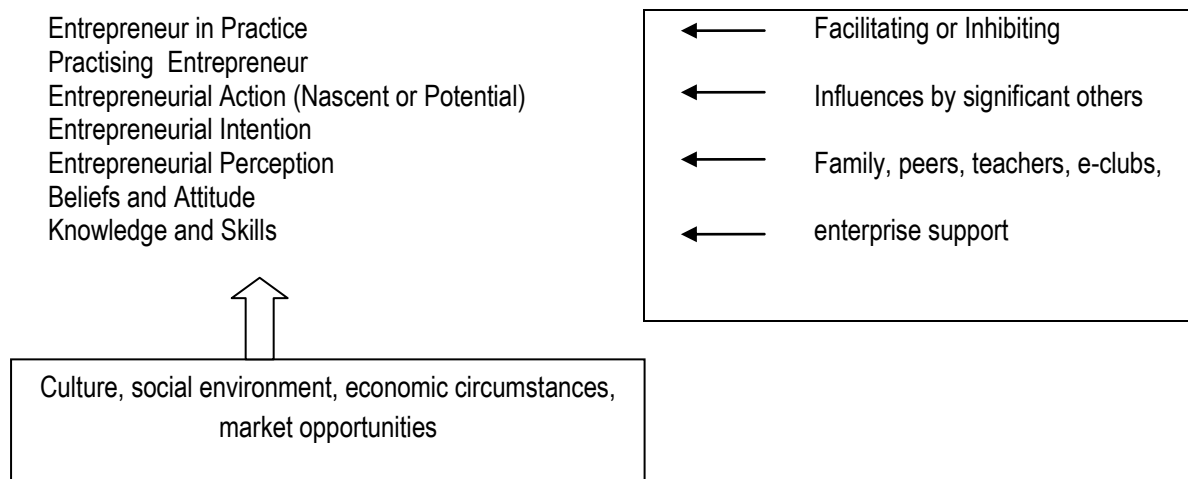
Evaluating enterprise education

It is acknowledged that enterprise/entrepreneur education varies in form, location, content and delivery (Gibb, 1996 and Pittaway and Cope, 2007) and furthermore in quality and assessment (Matlay, 2005 and Matlay and Carey, 2007). It is not clear as to whether those who develop and deliver enterprise/entrepreneur education programmes understand and address their underpinning philosophical foundations (Hannon, 2005) which in turn impacts upon the outcomes of such programmes, the educational experience of the student and the form and value of such education. On the basis that there has been limited attention given to impact such as programme design and pedagogical approach, Fayolle, Gailly and Lassas-Clerc (2006) have developed a common framework enabling the evaluation and comparison of enterprise/entrepreneur education programmes, which they maintain may also be used to improve the design of such education. The theory of planned behaviour underpins this framework as it is based upon the notion of intention being a predetermination of behaviour. Developing this framework, the transition of a student into an entrepreneur appears linear as progress to entrepreneurship indicates three conceptual determinants which need to be developed to clarify intention.

The first, is attitude towards entrepreneurial behaviour borne out of positive or negative appraisals of entrepreneurial behaviour. Secondly, subjective norms, the actual or perceived social pressures relating to entrepreneurial behaviour. Thirdly, the perceived behavioural control, where the individual is cognisant of their own ability to perform the behaviour easily or with difficulty, impacts upon their intention. The framework further promotes the notion that potential entrepreneurs need knowledge and skills – a major focus of enterprise education. Furthermore, self-reflection leads to the establishment of beliefs and attitude towards entrepreneurship which clarify and underpin intention. The theory of planned behaviour then promotes the link that intention determines future entrepreneurial behaviour and action. Thus utilising this framework in

combination with the pragmatic progress into entrepreneurship (Muir 1997 and 1999) then, Fig.3. Process of Becoming an Entrepreneur, clarifies a model that will be recognisable to enterprise educators.

Fig. 3. Process of Becoming an Entrepreneur



As the student progresses, they are constantly being influenced by those around them, just as the cultural and marketplace environment provides greater or lesser challenges to the entrepreneurial journey. Beyond beliefs, understandings and intentions; there is the reality of the process of becoming an entrepreneur, some of which may take place within or after engaging in enterprise education. Moving through the process of becoming an entrepreneur then there is the final stage of the practice of being an entrepreneur (Muir 1997 and 1999). However, there are still gaps between *intention to become* an entrepreneur, engaging in the *process of becoming* an entrepreneur and the *practice of being* an entrepreneur. This progress may not be linear and is supported and driven by critical self-reflective practice.

Focusing on this framework, enterprise/entrepreneur education clearly intervenes at the level of developing knowledge and skills. Yet the extent to which there is any educational intervention at other levels is both variable and questionable. Similarly enterprise education assessment, focuses upon determining student entrepreneurial knowledge and skills. How much consideration is given to assessment of student learning needs at other levels would be a meaningful project for research. There is still the criticism that much

assessment evaluates intention and the gap between intention and behaviour is not known or understood. This framework is much about the pedagogy of teaching and promoted from a university perspective.

Linking identity as a reflexive journey with entrepreneurship is a social process and links with communities of practice as Warren concludes "... provides a powerful means of exploring the dynamics of entrepreneurial transition" (2004:25). Thus, by overlapping the above framework for the process of becoming an entrepreneur with the cycle of identity theory, pedagogical concerns become more student centred and, student learning needs become the locus of attention. Enterprise/entrepreneur education intervention, and hence the assessment of it, becomes relevant in a more complex and varied number of ways. Some such ways are suggested below in Fig 4. Enterprise Education and Learning where the aim of the programme is 'for' entrepreneurship, rather than 'about' entrepreneurship (Rae 1999 and Edwards and Muir 2005). The questions of programme content, pedagogy, who should be educators and how can they perform as learning enablers and entrepreneurial skills developers, rather than dispatchers of knowledge is beyond the scope of this paper (see discussions in Kothari and Handscombe 2007 and Hytti and O'Gorman 2004). However they are vital questions to be answered.

Fig 4. Enterprise Education and Learning

Linear model of enterprise/ entrepreneur education	Enterprise/entrepreneur learning based on identity transfer as an ongoing cyclical development.
Enterprise/entrepreneur education as a chosen subject.	Enterprise/education learning as a life-changing opportunity.
What is an entrepreneur?	What does it mean for the student to become an entrepreneur?
What skills and knowledge do entrepreneurs need?	How can the student develop a portfolio of skills and knowledge needs for their entrepreneurial development?
What do entrepreneurs do?	How can the student convert theory into practice?
Academic research methods.	Market and marketing research methods.
Critique of examples and case studies.	Critical reflection on practice.
Enterprise/ entrepreneur education completed with an award ceremony.	Enterprise /entrepreneur education learning as a life-long opportunity and linkage between practicing entrepreneur and educational institution.

Evaluating enterprise education for the economy

High rates of UK unemployment and more so 'under-employment' in relation to graduates; coupled with a rise in 'Graduate NEET's' (not in education, employment or training) implies that there is an economic and educational need to develop entrepreneurial people as well as entrepreneurs through all levels of education (Edwards, 2011). "Many socio-economic and cultural aspects of graduate employment remain under researched and there is a notable shortage of empirically rigorous studies that focus on graduate self-employment and/or related new venture creation" Matlay (2011:168), moreover, Universities Careers Centre's are now encouraged to promote entrepreneurship as a viable career option and as Rae highlights the "...the nature of graduate careers has changed, with the expectation of finding graduate-level jobs being unrealistic for many" (2010:593). Such developments need to encompass and acknowledge the value of entrepreneurship on the economy and society, from creating businesses and in turn creating employment (Edwards, 2011). Researchers such as Garavan and O'Cinneide are in favour of policy makers and political decision makers who appreciate the 'role of the entrepreneur' and ascertain that entrepreneurs should be viewed "as a possible solution to rising unemployment rates and as a recipe for economic prosperity" (1994:3). Nevertheless, this is not only the case in the UK; Finnish policy makers viewed entrepreneurship as an answer to economic difficulties in the 1990's (Erkkilä, 2000) and another example can be drawn from Anderseck's work which is written from a German economical perspective:

"Another reason for the advent of entrepreneurship as an academic subject is to be found in the political area. Facing the boom, in the new economy and examining statistics about manpower employment in small and medium-sized enterprises, politicians in many countries have recognized Entrepreneurship as a powerful tool by which to solve serious economic and social problems" (Anderseck, 2004:194)

As a counter argument Wolf questions whether increasing government expenditure and attention to education is the answer to economic growth (2002:14). Whilst there is some evidence that enterprise education within universities is producing people who start their own businesses and contribute to the wealth of the nation (Kothari and Handscombe, 2007); there is a requirement for longitudinal evaluations which can capture data on growth levels, long term incubation graduate entrepreneurs (Cox, Mueller and Moss, 2002) and aspects of sustainability, serial entrepreneurs and portfolio entrepreneurs. There is some fear among universities that without such data, and evidence of long term success, sources of funding for enterprise education might lapse (Handscome, Rodriguez-Falcon and Patterson, 2005).

Conclusions

Evaluations of enterprise/entrepreneur education programmes is borne out of and sometimes not changed from standard university evaluation of courses which focuses upon university achievement in terms of number of students enrolled, student retention and student's achievements in terms of assessment pass levels. Whilst much enterprise/entrepreneur education claims to produce individuals who will act as independent entrepreneurs (Hytti and O'Gorman, 2004) evidence mainly supports the achievement of individuals who have the intention of starting their own enterprise. There is the need to move beyond this if enterprise education interventions are to produce entrepreneurial students who actually become entrepreneurs. Whilst it is recognised that "... a critical constraint to developing effective enterprise education is the development of appropriately trained trainers" Hytti and O'Gorman (2004:20) the implications of this are not always fully recognised. Criticism of educators, interpreted as the disparity between their teaching skills in the subject matter and the learning needs of potential entrepreneurs, focuses upon content and delivery. It is the educators who establish the courses, their content, pedagogy and assessment and thus their understanding of entrepreneurial needs and students' entrepreneurial learning journeys are paramount. Reluctance to move away from standard university assessments is evidence of a lack of understanding of these needs. Assessment needs to be inclusive of personal issues of identity development, clearer linkage between theory and practice and critical reflection on practice. This means that enterprise/entrepreneur education evaluation of courses needs to take this into account and go beyond entrepreneurial intention, into practice.

Furthermore, understanding that entrepreneurial activity is complex, varied and often a life-time commitment calls for long-term studies of entrepreneur alumni. Although this is a growing research area, little evidence can support the notion that enterprise/entrepreneurship education can actually impact upon entrepreneurial activity from initiation to exit (Matlay, 2008). Entrepreneur alumni growth and development patterns as micro-business owners, fast-growth company leaders, portfolio entrepreneurs, serial entrepreneurs, provide essential knowledge which feeds back into refinement of existing courses as well as the development of new courses. It also enables researchers to evaluate the long term value of enterprise education in its contribution to the society, not just in economic terms of employment and national wealth creation, but also in wider concepts such as the environment and 'green' concerns, community and social enterprise, ethics and employment and trading practices.

Promoting the notion that universities, through enterprise/entrepreneurship education can produce entrepreneurs with the financial tag that is inclusive of this concept, is limiting. If the aim of enterprise/entrepreneur education is to enable individuals to become entrepreneurs and enact that identity through their values judgements, business acumen, social responsibility and personal achievements and

satisfaction, then the authors conclude that evaluation of enterprise education needs to expand to embrace (and recognise) the learning development of the whole person, as opposed to economic measures based on quantitative data of number of businesses and number of new jobs created.

References

- Anderseck, K., (2004) Institutional and academic entrepreneurship: implications for university governance and management. *Higher education in Europe*, 29 (2), 193 - 200
- Bandura, A. (1986) *Social Foundation of Thought and Action: A Social Cognitive Theory*, Englewood Cliffs, NJ: Prentice Hall
- Boer, J. (2008). 'Collective intention, social identity and rational choice.' in *Journal of Economic Methodology*, 15(2): 169 0 184
- Bolton, J. E. (1971) *Report of the committee of enquiry on Small Firms*, cmdnd 4811, London: HMSO
- Burke, P.J. and Stets, Jan E. (2009) *Identity Theory*, Oxford: Oxford University Press
- Burke, P. J. and Tully, J. C. (1977) 'The measurement of role identity' in *Social Forces* 55:881-896
- Cox, L. W., Mueller, S. L. And Moss, S. E. (2002) 'The impact of entrepreneurship education on entrepreneurial self-efficacy', *International Journal of Entrepreneurship Education*, 1(1): 229 – 45
- Edwards, L-J. (2011) 'The Entrepreneurial Journey from University to Business.' *Unpublished PhD submission* August 2011, University of Glamorgan.
- Edwards, L-J and Muir, E. J. (2005), "Promoting entrepreneurship at the University of Glamorgan through formal and informal learning", *Journal of Small Business and Enterprise Development*, Vol. 12 No. 4
- Elliott, A. (2008) *Concepts of the Self*, Second Edition. Cambridge, UK: Polity Press
- Erkkilä, K. (2000) *Entrepreneurial Education: Mapping the Debates in the United States, The United Kingdom and Finland*, New York: Garland Publishing, Inc
- Farmer, S.M., Yao, X. and Kung-McIntyre, K. (2009) 'The Behavioural Impact of Entrepreneur Identity Aspiration and Prior Entrepreneurial Experience.' in *Entrepreneurship, Theory and Practice* March, 2011: 245 – 272
- Fayolle, A., Gailly, B. and Lassas-Clerc, N. (2006) 'Assessing the impact of entrepreneurship education programmes: a new methodology.' in *Journal of European Industrial Training*, 3-(9): 701 - 720
- Garavan, T.N. and O'Cinneide B. (1994). Entrepreneurship Education and Training Programmes: A review and evaluation Part 1. *Journal of European Industrial training* 18, 8, p3-12
- Gibb, A.A. (1994). Do we really teach (approach) small business the way we should? *Journal of small business and entrepreneurship*, 11, 4 - 27
- Gibb, A. (1996) 'Entrepreneurship and Small Business Management: Can we afford to neglect them in the twenty-first century business school? *British Journal of Management* 7(4): 309-21
- Page: 14
- Handsome, R. D; Rodriguez-Falcon, E. and Patterson, Embedded enterprise learning: about, through, for

and from 2005 Proceedings of IMEC 2005, 2005 ASME International Mechanical Engineering Congress and Exposition Nov 5 – 11 2005 Orlando Florida

- Hannon, P. (2005) 'Philosophies of enterprise and entrepreneurship education and challenges for higher education in the UK.' in *Entrepreneurship and Innovation*, May: 105-114
- Hills, G.E. (1988) Variations in University Entrepreneurship Education: An empirical study of an evolving field. *Journal of business venturing*, 3, 109-122
- Hoang, H. Gimeno, J. (2005) *Becoming an Entrepreneur: A theory of entrepreneurial identity*, Paris: INSEAD
- Howorth, C., Tempest, S. and Coupland, C. (2005) 'Rethinking entrepreneurship methodology and definition of the entrepreneur.' in *Journal of Small Business and Enterprise Development*, 12(1): 24 – 40
- Hytti, U. and O'Gorman C. (2004) 'What is "enterprise education"? An analysis of the objectives and methods of enterprise education programmes in European countries.' In *Education and Training*, 46(1): 11 – 23
- Ibarra, H. (1999) *Working Identities: Unconventional Strategies for Reinventing Your Career*, Boston: Harvard Business School Press
- Ibarra, H. (2002) 'How to stay stuck in the wrong career' in *Harvard Business Review*, 8(12): 40-8
- Ireson, J., Mortimore, P. and Hallam, S. (1999) 'The Common Strands of Pedagogy and their Implications' in Mortimore, Peter (ed.) (1999) *Understanding Pedagogy and its Impact on Learning*, London: Paul Chapman
- Jenkins, R. (2008) *Social Identity*, 3rd Edition, London: Routledge
- Khapova, S.W., Arthur, M.B., Wilderom, C.P.M. and Svensson, J.S. (2007) *Career Development International* 12(7): 584 – 595
- Kolb, D. (1984) *Experiential Learning: Experience as the source of learning and development*, Englewood Cliff, NY: Prentice Hall
- Kothari, S. and Handscombe, R. D. (2007) 'Sweep or seep? Structure, culture, enterprise and universities.' in *Management Decision* 45(1): 43 – 61
- Levie, J. (1999) Department for Education and Employment. *Entrepreneurship Education in Higher Education in England a survey*. London: Department for Education and Employment.
- Matlay, H. (2005) 'Entrepreneurship education in UK business schools: Conceptual, contextual and policy consideration.' in *Journal of Small Business and Enterprise Development*, 12(4): 627 – 643
- Matlay, H. (2008) 'The impact of entrepreneurship education on entrepreneurial outcome.' in *Journal of Small Business and Enterprise Development*, 15(2): 382 -96

- Matlay, H. and Carey, C. (2007) 'Entrepreneurship education in the UK: a longitudinal perspective.' *Journal of Small Business and Enterprise Development*, 14(2): 252 – 63
- Matlay, H., 2011. The influence of stakeholders on developing enterprising graduates in UK HEI's. *International Journal of Entrepreneurial Behaviour & Research*, 17 (2), 166-182
- McCall, G. J and Simmons, J. L. (1966) *Identities and interactions*, New York: The Free Press
- Muir, E.J. (1997) *Women Entrepreneurs in the EU: Motivation and Realisation of Starting a Business*, Unpublished PhD thesis, Bristol University.
- Muir, E.J. (1999) *Women Entrepreneurs in the EU: Motivation and realisations for starting a business*, ICSB International Conference, Naples
- Muir, E. J., Atkinson, C. and Angove, M. (2001) *Welsh Entrepreneuses on the Web: Personal, professional and business support needs of women entrepreneurs in Industrial South Wales*, Executive Report. University of Glamorgan
- Noel, T. W. (2001) 'Effects of entrepreneurial education on intent to open a business' in *Frontiers of Entrepreneurship Research*, Babson conference proceedings available at www.babson.edu/entrep/fer
- Pittaway, L. and Cope, J. (2007) 'Entrepreneurship Education: A Systematic review of the Evidence.' in *International Small Business Journal* 25(5): 479 -510
- Rae, D. (1999) *The Entrepreneurial Spirit*, Dublin: Blackhall Publishing
- Rae, D. (2010) "Universities and enterprise education: responding to the challenges of the new era", *Journal of Small Business and Enterprise Development*, Vol. 17, No.4, pp. 591- 606
- Terry, D. J., Hogg, M. A. and White, K. M. (1999) 'The theory of planned behaviour: Self-identity, social identity and group norms.' in *The British Journal of Social Psychology*, 38: 225 – 244
- Warren, L. (2004) 'Negotiating Entrepreneurial Identity: Communities of practice and changing discourses' in *Entrepreneurship and Innovation*, Feb.: 25-35
- Watson, C.H. 2001. 'Small business versus entrepreneurship revisited', in Brockhaus, R. H., Hills, G.E., Klandt, H. & Welsch, H.P. (2001) *Entrepreneurship Education a global view*, Burlington: Ashgate Publishing Ltd
- Wolf, A., 2002. *Does education matter? Myths about education and economic growth*. (s.l.): Penguin books Ltd
- Williams, G. 2003. 'An honest living or dumbing down? In Williams, G. (2003) *The Enterprising University, reform, excellence and equity*, Buckingham: The Society for Research into Higher Education and Open University Press